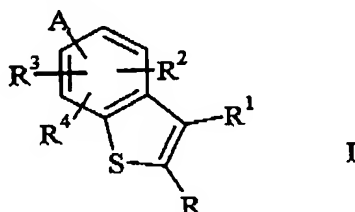


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Amendments to the Claims

1. (Currently amended): The Δ compounds of Formula I:



where:

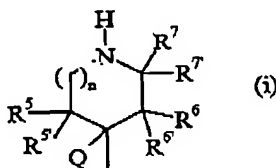
R is hydrogen, halo, trifluoromethyl or C₁-C₆ alkyl;

R¹ is hydrogen, halo, trifluoromethyl, phenyl, or C₁-C₆ alkyl;

R², R³, and R⁴ are independently hydrogen, halo, trifluoromethyl, cyano, C₁-C₄ alkoxy, C₁-C₄ alkoxycarbonyl, C₁-C₆ alkyl, C₁-C₆ alkyl substituted with a substituent selected from the group consisting of C₁-C₄ alkoxy and hydroxy, or -C(O)NHR⁹;

R⁹ is C₁-C₈ alkyl where the alkyl chain is optionally substituted with a substituent selected from the group consisting of phenyl and pyridyl;

A is attached at either the 4- or 7-position of the ~~benzofuran~~ benzothiophene nucleus and is an amine of formula:



n is 0, or 1, ~~or~~ 2;

R⁵, R⁶, and R⁷ are independently hydrogen or C₁-C₄ alkyl;

Q is hydrogen;

R^{5'} is hydrogen or methyl, provided that R^{5'} may be methyl only when R⁵ is other than hydrogen, or R^{5'} and Q taken together with the carbon atoms to which they are attached form a double bond;

R^{6'} is hydrogen or methyl, provided that R^{6'} may be methyl only when R⁶ is other than hydrogen, or R^{6'} and Q taken together with the carbon atoms to which they are attached form a double bond;

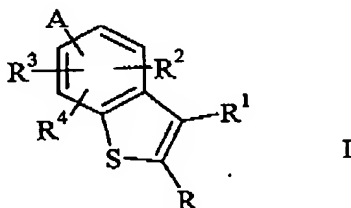
R^{7'} is hydrogen or methyl, provided that R^{7'} may be methyl only when R⁷ is other than hydrogen;

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or a pharmaceutically acceptable acid addition salts thereof, subject to the following provisos:

- a) when n is 1 or 2, at least one of R^5 , R^6 , and R^7 , must be other than hydrogen; and
- b) no more than two of R^5 , R^5 , R^6 , R^6 , R^7 , and R^7 may be other than hydrogen.

2. (Currently amended): A pharmaceutical formulation which comprises, in association with a pharmaceutically acceptable carrier, diluent or excipient, a compound of Formula I:



where:

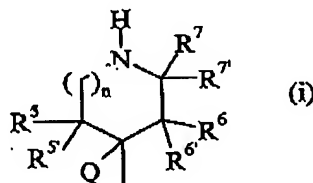
R is hydrogen, halo, trifluoromethyl or C_1 - C_6 alkyl;

R^1 is hydrogen, halo, trifluoromethyl, phenyl, or C_1 - C_6 alkyl;

R^2 , R^3 , and R^4 are independently hydrogen, halo, trifluoromethyl, cyano, C_1 - C_4 alkoxy, C_1 - C_4 alkoxy carbonyl, C_1 - C_6 alkyl, C_1 - C_6 alkyl substituted with a substituent selected from the group consisting of C_1 - C_4 alkoxy and hydroxy, or $-C(O)NHR^9$;

R^9 is C_1 - C_8 alkyl where the alkyl chain is optionally substituted with a substituent selected from the group consisting of phenyl and pyridyl;

A is attached at either the 4- or 7-position of the ~~benzofuran~~ benzothiophene nucleus and is an amine of formula:



n is 0, 1, or 2;

R^5 , R^6 , and R^7 are independently hydrogen or C_1 - C_4 alkyl;

Q is hydrogen;

$R^{5'}$ is hydrogen or methyl, provided that $R^{5'}$ may be methyl only when R^5 is other than hydrogen, or $R^{5'}$ and Q taken together with the carbon atoms to which they are attached form a double bond;

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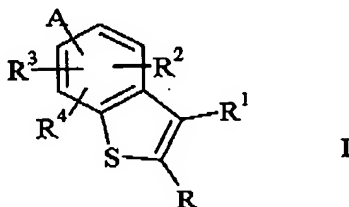
$R^{6'}$ is hydrogen or methyl, provided that $R^{6'}$ may be methyl only when R^6 is other than hydrogen, or $R^{6'}$ and Q taken together with the carbon atoms to which they are attached form a double bond;

$R^{7'}$ is hydrogen or methyl, provided that $R^{7'}$ may be methyl only when R^7 is other than hydrogen;

or a pharmaceutically acceptable acid addition salts thereof, subject to the following provisos:

- a) when n is 1 or 2, at least one of R^5 , R^6 , and R^7 , must be other than hydrogen; and
- b) no more than two of R^5 , $R^{5'}$, R^6 , $R^{6'}$, R^7 , and $R^{7'}$ may be other than hydrogen.

3. (Currently amended): A method for increasing activation of the 5-HT_{2C} receptor in mammals, comprising administering to a mammal in need of such activation a pharmaceutically effective amount of a compound of Formula I:



where:

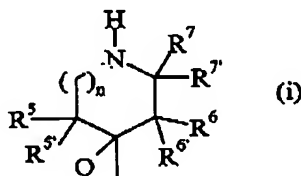
R is hydrogen, halo, trifluoromethyl or C₁-C₆ alkyl;

R^1 is hydrogen, halo, trifluoromethyl, phenyl, or C₁-C₆ alkyl;

R^2 , R^3 , and R^4 are independently hydrogen, halo, trifluoromethyl, cyano, C₁-C₄ alkoxy, C₁-C₄ alkoxycarbonyl, C₁-C₆ alkyl, C₁-C₆ alkyl substituted with a substituent selected from the group consisting of C₁-C₄ alkoxy and hydroxy, or -C(O)NHR⁹;

R^9 is C₁-C₈ alkyl where the alkyl chain is optionally substituted with a substituent selected from the group consisting of phenyl and pyridyl;

A is attached at either the 4- or 7-position of the ~~benzofuran~~ benzothiophene nucleus and is an amine of formula:



n is 0, 1, or 2;

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R^5 , R^6 , and R^7 are independently hydrogen or C_1 - C_4 alkyl;

Q is hydrogen;

$R^{5'}$ is hydrogen or methyl, provided that $R^{5'}$ may be methyl only when R^5 is other than hydrogen, or $R^{5'}$ and Q taken together with the carbon atoms to which they are attached form a double bond;

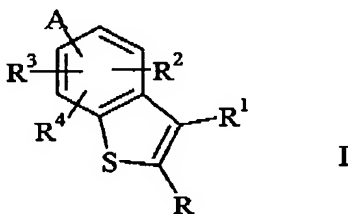
$R^{6'}$ is hydrogen or methyl, provided that $R^{6'}$ may be methyl only when R^6 is other than hydrogen, or $R^{6'}$ and Q taken together with the carbon atoms to which they are attached form a double bond;

$R^{7'}$ is hydrogen or methyl, provided that $R^{7'}$ may be methyl only when R^7 is other than hydrogen;

or a pharmaceutically acceptable acid addition salts thereof, subject to the following provisos:

- a) when n is 1 or 2, at least one of R^5 , R^6 , and R^7 , must be other than hydrogen; and
- b) no more than two of R^5 , $R^{5'}$, R^6 , $R^{6'}$, R^7 , and $R^{7'}$ may be other than hydrogen.

4. (Currently amended): A method for the treatment of obesity in mammals, comprising administering to a mammal in need of such treatment an effective amount of a compound of Formula I:



where:

R is hydrogen, halo, trifluoromethyl or C_1 - C_6 alkyl;

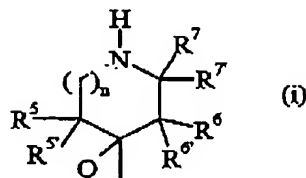
R^1 is hydrogen, halo, trifluoromethyl, phenyl, or C_1 - C_6 alkyl;

R^2 , R^3 , and R^4 are independently hydrogen, halo, trifluoromethyl, cyano, C_1 - C_4 alkoxy, C_1 - C_4 alkoxycarbonyl, C_1 - C_6 alkyl, C_1 - C_6 alkyl substituted with a substituent selected from the group consisting of C_1 - C_4 alkoxy and hydroxy, or $-C(O)NHR^9$;

R^9 is C_1 - C_8 alkyl where the alkyl chain is optionally substituted with a substituent selected from the group consisting of phenyl and pyridyl;

A is attached at either the 4- or 7-position of the ~~benzofuran~~ benzothiophene nucleus and is an amine of formula:

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n is 0, 1, or 2;

R^5 , R^6 , and R^7 are independently hydrogen or C_1 - C_4 alkyl;

Q is hydrogen;

$R^{5'}$ is hydrogen or methyl, provided that $R^{5'}$ may be methyl only when R^5 is other than hydrogen, or $R^{5'}$ and Q taken together with the carbon atoms to which they are attached form a double bond;

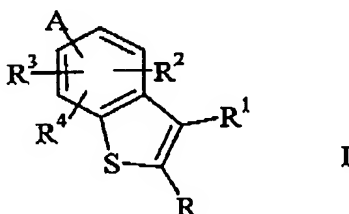
$R^{6'}$ is hydrogen or methyl, provided that $R^{6'}$ may be methyl only when R^6 is other than hydrogen, or $R^{6'}$ and Q taken together with the carbon atoms to which they are attached form a double bond;

$R^{7'}$ is hydrogen or methyl, provided that $R^{7'}$ may be methyl only when R^7 is other than hydrogen;

or a pharmaceutically acceptable acid addition salts thereof, subject to the following provisos:

- a) when n is 1 or 2, at least one of R^5 , R^6 , and R^7 , must be other than hydrogen; and
- b) no more than two of R^5 , $R^{5'}$, R^6 , $R^{6'}$, R^7 , and $R^{7'}$ may be other than hydrogen.

5. (Currently amended): A method for the treatment of depression in mammals, comprising administering to a mammal in need of such treatment an effective amount of a compound of Formula I:



where:

R is hydrogen, halo, trifluoromethyl or C_1 - C_6 alkyl;

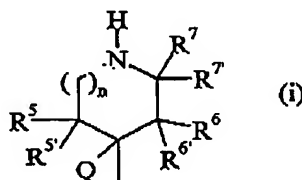
R^1 is hydrogen, halo, trifluoromethyl, phenyl, or C_1 - C_6 alkyl;

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R^2 , R^3 , and R^4 are independently hydrogen, halo, trifluoromethyl, cyano, C_1 - C_4 alkoxy, C_1 - C_4 alkoxycarbonyl, C_1 - C_6 alkyl, C_1 - C_6 alkyl substituted with a substituent selected from the group consisting of C_1 - C_4 alkoxy and hydroxy, or $-C(O)NHR^9$;

R^9 is C_1 - C_8 alkyl where the alkyl chain is optionally substituted with a substituent selected from the group consisting of phenyl and pyridyl;

A is attached at either the 4- or 7-position of the ~~benzofuran~~ benzothiophene nucleus and is an amine of formula:



n is 0, 1, or 2;

R^5 , R^6 , and R^7 are independently hydrogen or C_1 - C_4 alkyl;

Q is hydrogen;

$R^{5'}$ is hydrogen or methyl, provided that $R^{5'}$ may be methyl only when R^5 is other than hydrogen, or $R^{5'}$ and Q taken together with the carbon atoms to which they are attached form a double bond;

$R^{6'}$ is hydrogen or methyl, provided that $R^{6'}$ may be methyl only when R^6 is other than hydrogen, or $R^{6'}$ and Q taken together with the carbon atoms to which they are attached form a double bond;

$R^{7'}$ is hydrogen or methyl, provided that $R^{7'}$ may be methyl only when R^7 is other than hydrogen;

or a pharmaceutically acceptable acid addition salts thereof, subject to the following provisos:

- a) when n is 1 or 2, at least one of R^5 , R^6 , and R^7 , must be other than hydrogen; and
- b) no more than two of R^5 , $R^{5'}$, R^6 , $R^{6'}$, R^7 , and $R^{7'}$ may be other than hydrogen.

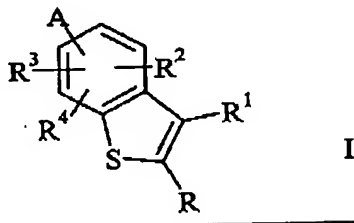
6. (Previously presented): The method of Claim 3 where the mammal is human.

7. (Previously presented): The method of Claim 4 where the mammal is human.

8. (Previously presented): The method of Claim 5 where the mammal is human.

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9. (Currently amended): A method for the treatment of obsessive compulsive disorder in mammals, comprising administering to a mammal in need of such treatment an effective amount of a compound of Formula I; of Claim 1, or a pharmaceutically acceptable acid addition salt thereof.



where:

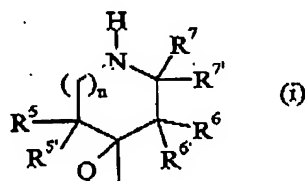
R is hydrogen, halo, trifluoromethyl or C₁-C₆ alkyl;

R¹ is hydrogen, halo, trifluoromethyl, phenyl, or C₁-C₆ alkyl;

R², R³, and R⁴ are independently hydrogen, halo, trifluoromethyl, cyano, C₁-C₄ alkoxy, C₁-C₄ alkoxycarbonyl, C₁-C₆ alkyl, C₁-C₆ alkyl substituted with a substituent selected from the group consisting of C₁-C₄ alkoxy and hydroxy, or -C(O)NHR⁹;

R⁹ is C₁-C₈ alkyl where the alkyl chain is optionally substituted with a substituent selected from the group consisting of phenyl and pyridyl;

A is attached at either the 4- or 7-position of the benzofuran-benzothiophene nucleus and is an amine of formula:



n is 0, 1, or 2;

R⁵, R⁶, and R⁷ are independently hydrogen or C₁-C₄ alkyl;

Q is hydrogen;

R⁵ is hydrogen or methyl, provided that R⁵ may be methyl only when R⁵ is other than hydrogen, or R⁵ and Q taken together with the carbon atoms to which they are attached form a double bond;

R⁶ is hydrogen or methyl, provided that R⁶ may be methyl only when R⁶ is other than hydrogen, or R⁶ and Q taken together with the carbon atoms to which they are attached form a double bond;

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R⁷ is hydrogen or methyl, provided that R⁷ may be methyl only when R⁷ is other than hydrogen;

or a pharmaceutically acceptable acid addition salts thereof, subject to the following provisos:

- a) when n is 1 or 2, at least one of R⁵, R⁶, and R⁷, must be other than hydrogen; and
b) no more than two of R⁵, R^{5'}, R⁶, R^{6'}, R⁷, and R^{7'} may be other than hydrogen.

10. (Previously presented): The method of Claim 9 where the mammal is human.

11. (Currently amended): A compound of according to Claim 1 where A is attached at the 7-position of the ~~benzofuran~~ benzothiophene nucleus.

12. (Previously presented): A compound according to Claim 11 where Q is hydrogen.

13. (Previously presented): A compound according to Claim 12 where R⁶ is C₁-C₄ alkyl and R⁵, R^{5'}, R⁷ and R^{7'} are each hydrogen.

14. (Currently amended): A compound according to Claim 13 where R⁶ is hydrogen, and R⁶ and the ~~benzofuran~~ benzothiophene core are in the cis configuration with regard to each other.

15. (Previously presented): A compound according to Claim 13 where R⁶ is methyl.

16. (Previously presented): A compound according to Claim 13 where R^{6'} is methyl.

17. (Previously presented): A compound according to Claim 11 where one of R^{5'} and Q, or R^{6'} and Q, taken together with the carbon atoms to which they are attached form a double bond.

18. (Previously presented): A compound according to Claim 17 where of R^{5'} and Q, taken together with the carbon atoms to which they are attached form a double bond, R⁶ is C₁-C₄ alkyl, and R^{6'} is methyl.

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19. (Previously presented): A compound according to Claim 18 which is 3,3-dimethyl-4-(6-fluorobenzothien-7-yl)-1,2,3,6-tetrahydropyridine.